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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/979,577	11/19/2001	Naohiro Kimura	YAMAP0794US	3319

7590

05/13/2004

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EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/979,577

Applicant(s)

KIMURA ET AL.

Examiner

Peter Vincent Agustin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 7-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (claims 1-6) in Paper No. 6 is acknowledged.
2. Claims 7-24 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors, e.g.,

Page 1, last line: "follow" should be --follows--.

Page 25, line 16: "baed" should be --based--.

Claim 3, line 9: "circumstance" should be --circumference--.

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4 & 6 rejected under 35 U.S.C. 102(b) as being anticipated by Aoki (JP 411306661 A).

In regard to claim 1, Aoki discloses an information reproduction apparatus (Figure 1) comprising: a rotating section (see solution) for rotating a disk-like information carrier (11) on which a unit of continuous information capable of being continuously read out is recorded; a CLV control section (21) for controlling the rotating section in such a manner that the information carrier is rotated at a constant linear velocity; a CAV control section (21) for controlling the rotating section in such a manner that the information carrier is rotated at a constant angular velocity; a rotation control selection section (21, 26 & 28) for selectively operating the CLV control section or the CAV control section; and an information determination section (20) for detecting an information length of the continuous information, wherein the rotation control selection section is constructed in such a manner as to selectively operate the CLV control section or the CAV control section based on a result of the detection of the information length of the continuous information by the information determination section (see paragraph 0013).

In regard to claim 2, Aoki (paragraph 0013) discloses that when first information having the information length as detected by the information determination section larger than a

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predetermined size is reproduced, the CLV control section is operated, and when second information having the information length as detected by the information determination section smaller than the predetermined size is reproduced, the CAV control section is operated.

In regard to claim 4, Aoki (paragraph 0016) discloses that the continuous information includes a header portion recording a block size or a file size, and a data portion, and the information determination section is constructed in such a manner as to detect the information length based on a content of the header portion.

In regard to claim 6, Aoki (paragraph 0014) discloses a focusing section (line 9) for focusing a light beam to the information carrier; a focusing control section (line 9) for controlling the light beam focused by the focusing section into a predetermined focus state; a tracking control section (line 10) for controlling the light beam focused by the focusing section in such a manner that the light beam correctly scans a track on the information carrier; and a reproduced signal processing section (figure 1, elements 12 & 13) for reproducing a signal read out from the information carrier.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Ishihara et al. (hereafter Ishihara) (US 5,805,548).

For a description of Aoki, see the rejection above. Furthermore, Aoki discloses that when second information having the information length as detected by the information determination section smaller than the predetermined size is reproduced, the CAV control section is operated (paragraph 0013). However, Aoki does not disclose that when first information having the information length as detected by the information determination section larger than a predetermined size is reproduced, the CAV control section is controlled in such a manner that the information carrier is rotated at as low a number of revolutions as a level where a transfer rate required to reproduce information recorded in a most inner circumference of the disk-like information carrier can be secured.

Ishihara discloses a CAV control section wherein when an information having a length larger than a predetermined size is reproduced, the CAV control section is controlled in such a manner that the information carrier is rotated at as low a number of revolutions as a level where a transfer rate required to reproduce information recorded in a most inner circumference of the disk-like information carrier can be secured (column 6, lines 37-67). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have controlled the CAV control section of Aoki in such a manner that the information carrier is rotated at as low a number of revolutions as a level where a transfer rate required to reproduce information recorded in a most inner circumference of the disk-like information carrier can be secured, as suggested by Ishihara, the motivation being to increase the transfer rate in the case of constant angular velocity reproduction (see also column 14, lines 11-29 & column 17, line 42 thru column 18, line 11).

10. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Aoki in view of Matsudo et al. (hereafter Matsudo) (US 5,347,506).

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For a description of Aoki, see the rejection above. However, Aoki remains silent to whether the information carrier has a first information recording area at an inner circumference side and a second information recording area at an outer circumference side both arranged in a radial direction, and the first information is recorded in the first information recording area and the second information is recorded in the second information recording area.

Matsudo discloses an information carrier having a first information recording area at an inner circumference side and a second information recording area at an outer circumference side both arranged in a radial direction, and the first information is recorded in the first information recording area and the second information is recorded in the second information recording area (column 1, lines 27-33). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have provided the first information recorded in the first information recording area (inner circumference) and the second information recorded in the second information recording area (outer circumference) of Matsudo to the information carrier of Aoki, the motivation being to obtain a constant read rate, thereby preventing motor control complexity (see also lines 33-45).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sontheimer (US 4,558,375) discloses (figure 1) a disc having an annular region of constant angular velocity recording at an inner circumference and an annular region of constant linear velocity recording at an outer circumference.

Uemura (US 5,687,148) discloses an optical disk having both constant linear and constant angular velocity recording regions.

Shimizume et al. (US 5,883,866) discloses a disk driving method (figure 10) where CAV reproduction control is used when the reproduction position is located in the inner region side, and CLV reproduction control is used when the reproduction position is located in the outer region side.

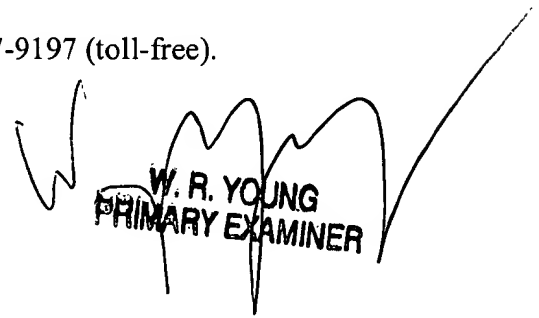
Kinoshita (US 6,137,575) discloses a step of reading data from the inner data area using a CAV system while reading data from the outer area using a CLV system.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is (703) 305-8980. The examiner can normally be reached on Monday thru Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PVA
05/03/2004


W. R. YOUNG
PRIMARY EXAMINER